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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,015	07/23/2001	Lucio Dell'Acqua	163-336	3502

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EXAMINER

MCKANE, ELIZABETH L

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 08/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/911,015	DELL'ACQUA ET AL.	
	Examiner	Art Unit	
	Leigh McKane	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al. (U.S. Patent No. 4,752,422) in view of Tsai (U.S. Pat. 6,135,427), Kawamura et al. (JP 631 34332), Dix et al. (U.S. Pat. 5,447,663), and Tsuaki (U.S. Pat. 4,563,313).

Uchida et al. disclose an ultrasonic humidifier which atomizes water in order to produce a water spray in the form of a mist. The device comprises a portable container body (1) that is divided into multiple compartments. The first compartment (15) is the utility chamber and the second compartment (4) is the spraying chamber. The first compartment has a body (5) that has an inlet channel for a cleaning fluid such as water, and an exit channel for the atomized liquid and vapor generated. At the bottom of the above body (5) there are ultrasonic vibrators (3) activated by an electric circuit in order to create the immediate atomization of the liquid to be applied (see Figure 1; column 1, line 25 to column 2, line 52). A cylindrical blowing nozzle (30) rotatably mounted at the top of the spraying chamber (4) directs the vapor. Additionally, in the first compartment is a blower (12) which creates a stream of air that is directed through a perforated wall (17) which separates compartments (15) and (4).

However, Uchida et al. fails to teach a means of grasping the neck of a jar, a

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piezoelectric element, a body member that is made of plastic or metallic materials, a handle, and an electronic floating device capable of communicating to the electronic circuit the level of liquid inside compartment where the liquid is atomized.

Tsai discloses a compact, small size humidifier which may be used as a portable humidifier. The humidifier includes an opening for receiving a number of different sockets allowing use of different sized water bottles as the water tank. The different sockets may be detachably affixed to the humidifier body. The humidifier has a connecting hole (142) which includes an annular protrusion (143) on the inner side of the wall thereof. A socket (2) is provided with inner screw threads (22) on its inner circumferential surface, and an annular recess (21) on its outer surface. A liquid container or bottle (3) is detachable connected to the socket by way of screw threads (31) on the bottle (3), which are engaged with the inner screw threads (22) of the socket (2). The bottle (3) is now attached to the socket and the combination is inserted into the connecting hole (142). The annular recess (21) of the socket (2) engages the annular protrusion (143) of the wall in the connecting hole (see Fig. 1 and column 3, lines 21-55). It is deemed obvious to one of ordinary level of skill in the art at the time the invention was made to modify Uchida et al. and include a means to grasp the neck of the jar as taught by Tsai in order to prevent the neck of the bottle from separated from the humidifier and provide a means of attaching various size bottles to the humidifier.

Kawamura et al. disclose a humidifying device which excites a piezoelectric element by a supersonic wave electric power source and vaporizes water droplets. The humidifying device is used to maintain the freshness of fruits (see translated abstract). One would have found it

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obvious to further modify Uchida et al. and substitute the piezoelectric element of Kawamura et al. for the ultrasonic vibrators of Uchida et al. as being functional equivalents thereof.

Uchida et al. disclose that the body of the humidifier is formed of synthetic resin. Uchida et al. does not teach a body member that is made of plastic or metallic materials. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a plastic or metallic material to form the body, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. See *In re Leshin*, 125 USPQ 416.

Dix et al. disclose a portable humidifier with a U-shaped retracting/telescoping handle (67) (see Figure 2). It would have been obvious to one having ordinary level of skill in the art at the time the invention was made to further modify Uchida et al. and include a handle as taught by Dix et al. in order to make the humidifier portable and easier to move.

Tsuaki teaches an air humidifier that includes a water level detector that detects the water level in the water reservoir. The water reservoir (2) is located in the compartment where the water is atomized into a fine mist. The water level detector (7) is operatively disposed in the water reservoir (2). The detector (7) includes a lead switch (8) mounted on the opposite side of the bottom plate (6) and a magnetic float member (9) movable along pole (10). The lead switch (8) closes when the float member (9) is below a predetermined water level due to the sensing of the float members magnetic switch (8) when float (9) downwardly moves along pole (10). The switch (8) functions in response to a detected water level in the reservoir. When the level reaches a predetermined minimum the switch closes and shuts off the ultrasonic vibrator thereby protecting the vibrating element (see column 2, lines 8-35). It would have been obvious to one

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of ordinary level of skill in the art to include an electronic flotation device inside compartment (4) as taught by Tsuaki in order to monitor the level of water in the reservoir and prevent damage to the ultrasonic vibrator/piezoelectric element.

Response to Arguments

3. Applicant's arguments filed 04 June 2004 have been fully considered but they are not persuasive.

Applicant's arguments suggest that the intended use of the cited prior art (humification of air) teaches away from the application of an atomized liquid. However, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). The combination of references, as presented in the rejections *supra* teaches each and every *structural* element of the claimed invention. Moreover, the examiner has provided ample motivation for the combination of references.

Furthermore, while Applicant alleges that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh McKane whose telephone number is 571-272-1275. The examiner can normally be reached on Monday-Wednesday (7:15 am-4:45 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 571-272-1275. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Leigh McKane
Primary Examiner
Art Unit 1744

elm
18 August 2004